

## EXTERNAL CAVITY TUNABLE OPTICAL TRANSMITTERS

### ABSTRACT

External cavity optical transmitters are disclosed which include a gain chip and a mirror that define an optical cavity. The optical cavity may include collimating lenses, electro-optic crystals for controlled phase shift, and additional frequency selective optical components such as a grating and/or an etalon. The external cavity laser is capable of lasing at any of the specified ITU wavelengths (frequencies) in the L, C, or any other band in the optical spectrum. The optical transmitter is wavelength tuned by a lens mounted on an actuator.